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10/771,891	02/04/2004	Gregory A. Majcher	00AB040 / ALBRP173USA	3878
7590 Susan M. Donahue Rockwell Automation 704-P, IP Department 1201 South 2nd Street Milwaukee, WI 53204			EXAMINER BONZO, BRYCE P	
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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/771,891  
Filing Date: February 04, 2004  
Appellant(s): MAJCHER ET AL.

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Himanshu S. Amin  
Reg. No. 40,894  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed October 3<sup>rd</sup>, 2007 appealing from the Office action mailed February 21<sup>st</sup>, 2007.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

6598106	Grieshaber et al.	7-2003
6,513,129	Tentji	1-2003

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

*Rejections under 35 USC §102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 23-28, 34 and 44 are rejected under 35 U.S.C. 102(e) as being anticipated by Grieshaber (United States Patent No. 6,598,106). As per the claims:

23. A system that facilitates generating a dynamic output in a state machine, comprising:

an input component that receives communication, the communication is related to at least one indicator that receives updated status/ event information from the communication (column 9, lines 60-65; the passage recites “repeatedly testing” which points to the signal updating); and

a logic function component that defines a logical function using at least one function block and links the logical function with the indicator to define the behavior of an output and selectively provide an output signal according to the logic function and

the at least one indicator (column 9, lines 49 through column 10, line 27; Figure 7, item 704 shows a logic function and an output varying with indicator).

24. The system of claim 23, the output signal is transmitted to at least one of a process, a machine, a backplane, a bus and a network (column 9, lines 60 through column 10, lines 27)..

25. The System of claim 23, further comprising a memory component that stores data that is operatively coupled to at least one of the interface component, the logic function component and the output component (Figure 5).

26. The system of claim 25, further comprising a processing component that executes instructions within the memory that is operatively coupled to at least one of the input component the output component and the memory component (Figure 5).

27. The system of claim 26, the processor updates the indicator according to the communication (column 9, lines 49 through column 10, line 28).

28. The system of claim 23, further comprising a closed loop component that receives information from the input component that is operatively coupled to the output component to provide feedback control (column 9, lines 49 through column 10, lines 28).

34. The system of claim 93, the indicator is at least one of a message connection health indicator, an I/O error indicator (column 9, lines 49 through column 10, lines 28), a run/idle indicator, a network error indicator, an I/O point fault indicator, a hardware input indicator, a hardware output indicator, an I/O data indicator, and an output device status indicator.

44. A system that provides an output, comprising:

- means for receiving information regarding associated logical function and status/event indicator components;

- means for determining the status of the associated logical function and status/event indicator components;

- means for selecting an output based on the information received; and

- means for broadcasting an output signal from an output component

(These process steps are disclosed in the fault analysis described at column 9, lines 49 through column 10, lines 28 and accompanying drawings).

*Rejections under 35 USC §103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 35 is rejected under 35 U.S.C. 103(a) as being unpatentable over Grieshaber (United States Patent No. 6,598,106 B1).

As per claim 35, Grieshaber does not explicitly disclose:

35. The system of claim 23, the input component further comprises a message buffer component employed to store at least one message and is operatively coupled to at least one of the input component and the logic function component.

Official Notice is given that it is notoriously well known in the computing arts to incorporate message buffers into data transmission systems. Buffers provides a reception and holding area, which while not necessary in some applications, is ubiquitous. The buffer allows messages to be received in chunks, stored awaiting processing, and be latched as group when passed on to the next element in a system. Thus it would have been obvious to one of ordinary skill in the art of computing, to explicitly incorporate buffers into the fault detection and failure handling system of Grieshaber thus creating a more fluid and fault tolerant system for handling faults.

Claims 29-33 and 36-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grieshaber (United States Patent No. 6,598,106 B1) in view of Tentij (United States Patent No. 6,513,129 B1).

As per claim 29, Grieshaber does not explicitly disclose, while Tentij teaches:

29. The system of claim 23, further comprising a configuration tool that creates an association between the logic function component and the at least one indicator (column 7, lines 10-22).

Grieshaber discloses a decision making element, which by definition is a functional block, but does not describe the mechanisms to implement the block or program the block leaving the reader fill in the missing area. Tentij describes a similar decision system for alerting and reporting, and further describes the configuration tool which programs the decision blocks with various rules. Tentij explicitly describes a shortfall in modern systems where it is difficult to program the decision blocks in fault alerting systems and designed a configuration tool for system such as Grieshaber. Thus it would have been obvious to one of ordinary skill in the art at the time of invention to incorporate the configuration tool and associated functions of Tentij into the fault handler of Grieshaber thereby creating a system which can monitor and react to faults while being able to be programming in a versatile manner.



30. The system of claim 29, the configuration tool further comprising an intelligence component employed to automatically determine an association between the logic function component and the at least one indicator (column 7, lines 23-56).

31. The system of claim 29, the configuration tool is one of a computer, a workstation, a handheld PC, a tablet PC, a personal digital assistant and a cell phone (column 7, lines 10-22).

As per claim 29, Grieshaber does not explicitly disclose, while Tentij teaches:

32. The system of claim 23, the logic function component is associated with at least one function block (column 7, lines 23-56).

Grieshaber discloses a decision making element, which by definition is a functional block, but does not describe the mechanisms to implement the block or program the block leaving the reader fill in the missing area. Tentij describes a similar decision system for alerting and reporting, and further describes the configuration tool which programs the decision blocks with various rules. Tentij explicitly describes a shortfall in modern systems where it is difficult to program the decision blocks in fault alerting systems and designed a configuration tool for system such as Grieshaber. Thus it would have been obvious to one of ordinary skill in the art at the time of invention to incorporate the configuration tool and associated functions of Tentij into the fault

handler of Grieshaber thereby creating a system which can monitor and react to faults while being able to be programming in a versatile manner.

33. The system of claim 1, the function block is one of a Boolean operator, a flip-flop, a counter, a timer and an analog function (column 7, lines 23-56).

As per claim 36, Grieshaber discloses:

A method to provide a variable output related to received information, comprising:

accepting an input comprising at least one indicator that indicates updated status/event information (column 9, lines 60-65);

associating the at least one indicator with the at least one function block (column 9, lines 49-column 10, lines 27); and

providing an output based at least in part upon the input and the logic function (column 9, lines 49-column 10, lines 28).

Grieshaber does not explicitly disclose, while Tentij teaches:

transmitting the input to a logic function, the logic function contains at least one function block (column 7).

Grieshaber discloses a decision making element, which by definition is a functional block, but does not describe the mechanisms to implement the block or program the block leaving the reader fill in the missing area. Tentij describes a similar decision

system for alerting and reporting, and further describes the configuration tool which programs the decision blocks with various rules. Tentij explicitly describes a shortfall in modern systems where it is difficult to program the decision blocks in fault alerting systems and designed a configuration tool for system such as Grieshaber. Thus it would have been obvious to one of ordinary skill in the art at the time of invention to incorporate the configuration tool and associated functions of Tentij into the fault handler of Grieshaber thereby creating a system which can monitor and react to faults while being able to be programming in a versatile manner.

37. The method of claim 36, farther comprising selecting a function block based at least in part upon the input received (Grieshaber: column 9, lines 49-column 10, lines 27).

38. The method of claim 36, further comprising associating the input with at least one function block via a configuration component (Tentij: column 7, lines 10-22).

39. The method of claim 36, further comprising receiving the output from the logic function and transmitting the output via an output component (Grieshaber: column 9, lines 49-column 10, lines 27).

40. The method of claim 36, the at least one indictor is received from an external source on one of a

periodic basis, a continuous basis and a one-time basis (Grieshaber: column 9, lines 49-column 10, lines 27).

41. (New) The method of claim 36, the at least one indictor is at least one of a status indicator and an event indicator (Grieshaber: column 9, lines 49-column 10, lines 27).

42. (New) The method of claim 41, the indicator is at least one of a message connection health indicator, an I/O error indicator, a run/idle indicator, a network error indicator, an I/O point fault indicator, a hardware input indicator, a hardware output indicator, an I/O data indicator, and an output device status indicator (Grieshaber: column 9, lines 49-column 10, lines 27).

43. The method of claim 37, the function block is one of a Boolean operator, a flip-flop, a counter, a timer and an analog function (Tentij: column 7, lines 23-56).

#### **(10) Response to Argument**

I. Applicant first argues that Grieshaber "...is silent regarding a logic function component as recited by the subject claims." The Examiner points out the cited prior art is used in a modern computer and thus every action is "logic function" as that is underlying principle of modern computer operation. Column 9, lines 57-60 specifically recite "recursive procedures" in a processor. One of ordinary skill in the art, clearly understands this to be a logic function. Further, Figure 7 clearly shows a Yes/No

decision process for the prior art system. The Examiner further believes this constitutes a "logic function".

II. Applicant continues their argument asserting the cited decision of Grieshaber is non-analogous to the claimed logic function and indicator. The Examiner points out the column 8, lines 48-57 describe three separate logic function blocks: a Bus Fault Monitor (558), a Monitor Processor (552) and a Signal Processor (554). Indicators are fed from one block to another block as indicators of faults. Each block performing processing based on the Yes/No values of the signals it receives.

III. Applicant further argues that "a bus error is not an indicator linked (i.e. input to) a logical function to define output behavior or provide an output signal." First, "linked" is not limited in meaning as Applicant implies. The specification does not redefine the word or explicitly limits meaning by context. As such the requirement that an indicator be "input to" is erroneous. Second, Grieshaber discloses in block 712 of Figure 7, having an output based on the combination of input and logic.

IV. Applicant argues that Tentij does not disclose the claimed features. The Examiner points out the reference is not directed towards those argued limitations. Applicant has attempted to argue the references separately.

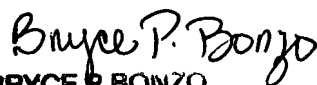
V. Applicant further argues that the claimed result would not provide the claimed invention. The Examiner refutes this, and directs the Board to the above specific citations of the claim limitations. Applicant has not attacked the reasons for combination directly, but has made a strange argument that the resulting combination of Grieshaber and Tentij has more capabilities than the claimed limitations. Despite, the emphasis on fault handling in a particular environment, the obvious combination still meets the fundamental error reporting limitations as disclosed and claimed.

**(11) Related Proceeding(s) Appendix**


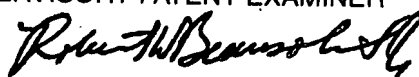
No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

  
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**PRIMARY EXAMINER**

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